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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/739,815	12/20/2000	Howard W. Fingerhut	BS00-192	4042
7590 11/10/2004		EXAMINER .		
WITHERS & KEYS, LLC			PALADINI, ALBERT WILLIAM	
P.O. BOX71355 MARIETTA, GA 30007-1355			ART UNIT PAPER NUMBER	
MARIETTA, C	A 30007-1333		2125	

DATE MAILED: 11/10/2004 \*

Please find below and/or attached an Office communication concerning this application or proceeding.



		Application No.	Applicant(s)	- O				
Office Action Summary		09/739,815	FINGERHUT ET AL.					
		Examiner	Art Unit					
		Albert W Paladini	2125					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
THE - External after - If the - If NC - Failur Any	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. e period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period we are to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	86(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	nely filed s will be considered timely. the mailing date of this comn D (35 U.S.C. § 133).	nunication.				
Status								
1)🖂	Responsive to communication(s) filed on 20 De	<u>ecember 2000</u> .						
2a) <u></u> ☐	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.							
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposit	ion of Claims							
5)□ 6)⊠ 7)□	Claim(s) 1-29 is/are pending in the application.  4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed.  Claim(s) 1-29 is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction and/or	vn from consideration.						
Applicati	ion Papers							
9)□	The specification is objected to by the Examine	r.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority (	ınder 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.								
Attachmen	t(s) e of References Cited (PTO-892)	4) 🔲 Interview Summary	(PTO-413)					
2) Notice 3) Inform	te of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) or No(s)/Mail Date 5/15/01.	Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate	52)				

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 3. Claims 1-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richetta (5499237).

In figure 7 Richetta discloses an apparatus and method for routing data <u>packets</u> that takes into account actual or historical <u>traffic</u> demand. Also provided is a method and apparatus that prevents link overloads taking into account link capacity and actual <u>traffic</u>. Also provided are an apparatus and method for routing data <u>packets</u> that is responsive to changes in system <u>traffic</u>. He teaches a method of simulating packet traffic by obtaining routing tables in step 102, simulating the traffic routing in step 107, and modifying the topology in step 116. Richetta does not explicitly use the phraseology "traffic logs" as recited in claims 1, 12, and 21; but it would have been obvious to one of ordinary skill in the art that the routing table contains "traffic logs," and that they are indexed so as to identify and recall them. Richetta does not also discuss generating a "histogram file" as recited in claims 1, 12, and 21.

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However, on lines 40-54 in column 1, Richetta states "Typically, it is advantageous for the network to attempt to select the shortest possible path to minimize delay, to consume a minimal amount of network resources, and to maximize reliability in delivering communications, information flow, or other service. At the same time, actions within the network need to balance the constraints of the delay, resource consumption, and reliability with the need to prevent overloading any of the network nodes or communication links, while maintaining delivery of the network traffic. Delivery of network traffic to its intended destination is desirably made with proper allowances for <u>statistical</u> variations in traffic and an ability for the network to absorb instantaneous changes in requested service without having to react to the volume of traffic by devising new routing instructions." It would have been obvious to one of ordinary skill in the art that a histogram representing the traffic distribution different times would allow one to estimate the statistical variations in traffic.

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## Relevant Prior Art

Datta (6209033) discloses a method and apparatus for evaluating network traffic where network capacity evaluation and planning (CEP) is performed based upon the <u>traffic</u> across the links of the network. Once a link's <u>traffic</u> volume has been measured, it is compared with the link's <u>traffic</u> capability, and the resulting parameters may be compared with the <u>traffic</u> and capability of other links of the network to create measures of network capacity and balance. Then, substituting simulated traffic volume amounts may make simulated changes to the network configuration and capabilities for selected link <u>traffic</u> measurements and capabilities, and the resulting determinations of network capacity and balance may then be compared to determine whether the simulated changes represent a preferred network configuration.

Saito (6563796) discloses a method and system for evaluating network traffic which involves a simulation where a logic to simulate a target system is assembled into a computer. The computer is then input with statistically processed results obtained from traffic measurement in the actual network system, and traffic based on the results of processing is simulated by generating random numbers, and the resulting quality for the generated traffic is evaluated. It also includes a second method based on evaluating a mathematical relationship between quality and operating environment such as traffic buffer size obtained by traffic theory. Traffic conditions are derived from statistical processing of traffic measurement in the information network system, as in the first method, or the person evaluating the system selects suitable traffic conditions under certain assumptions. In either method, the evaluation approach is based summarizing the measured results once into a small number of statistics, and analyzing the summarized statistics.

Hao (6728214) discloses a method of testing a network router for operation according to a given protocol which includes coupling a router under test (RUT) to a test host device, and configuring the device to <u>simulate</u> a network having at most a given number of router nodes and at most a given number of network nodes with edges connecting the router and the network nodes to one another. The host device sends information <u>packets</u> to and receives information <u>packets</u> from the RUT for each of a number of test network topologies under the

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given protocol. Each test network <u>topology</u> is determined by inserting or deleting an edge or a node to or from a prior test network <u>topology</u> in a probabilistic manner. Operation of the RUT is evaluated with respect to at least one of routing table compilation, <u>packet</u> forwarding, and network <u>topology</u> information accumulated by the RUT. A judgment concerning operation of the RUT under the given protocol is then rendered.

Any inquiry concerning this communication or earlier communication from the examiner should be direct to Albert W. Paladini whose telephone number is (572) 272-3748. The examiner can normally be reached from 7:30 to 3:30 PM on Monday, Tuesday, Thursday, and Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Leo P. Picard, can be reached on (572) 272-3749. The official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Albert W. Paladini Primary Examiner Art Unit 2125